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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,206	09/30/1998	CARL J. DISTER	98RE155	6382

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EXAMINER

MILLER, CRAIG S

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 04/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/164,206

Applicant(s)

Dister

Examiner

Craig Steven Miller

Group Art Unit

2857

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 14 Feb 2003

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-25 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 1-25 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hays *et al.* (6,260,004) or Wang *et al.* (5,566,092), either in view of Emori *et al.* and Lakin *et al.*

As to claims 1-6, 9-11, 13-16, 18, 23 and 24, said claims are directed towards a machine with a container mounted outside the machine which receives operation data from the machine with a heat dissipation device between the container and the outside of the machine. Hays *et al.* discloses in col. 7 lines 16+ that industrial equipment should be remotely monitored *in situ* and that such monitoring should be accomplished with network communications. Wang *et al.* discloses the monitoring of industrial equipment. To the left is an inverted image of figure 8 from Emori *et al.* Item [102] is a high heat generating device, item [103] is electronics which should be heat insulated yet electrically connected to item [102] while encased within electrical shielding. Items [101] and [101'] are heat dissipating fins. Emori *et al.* does not specify that the heat generation device is a dynamoelectric machine. Lakin discloses in col. 1 lines 16+ that a dynamoelectric machine generates heat which is known to be harmful to associated electronics and that such electronics require heat insulation from high heat generating sources. Neither Wang *et al.* nor Hays *et al.* specify that the monitoring electronics should be mounted upon the industrial equipment. The Examiner notes that it is well known to make integral that which was separate, In re Larson, 144 USPQ 347 (CCPA 1965), "*Although it is true that invention may be present under some circumstances in making integral that which was separate before, we do not feel that such is the case here. Improved results only will not take the case out of the general rule. There is also a requirement that the unification or integration involves more than mere mechanical skill. In re Murray*, 19 CCPA (Patents) 739, 53 F.2d 541, 11 USPQ 155; *In re Zabel et al.*, 38 CCPA (Patents) 832, 186 F.2d 735, 88 USPQ 367." Because the devices of Hays *et al.*, Wang *et al.* and Lakin *et al.* are within the art of machine monitoring, because the device of Emori *et al.* is within the general art of electronics mounting, because it is known to monitor the operation of a rotating machine, because it is known that dynamoelectric machines generate heat which is harmful to electronics, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify either of Hays *et al.* or Wang *et al.* to include the mounting of the monitoring electronics within an arrangement as suggested by Emori *et al.*, with the monitoring electronics within a separate container while being attached to the device to be monitored, so as

to receive the obvious benefits derived therefrom such as increased heat insulation and increased resistance to EMF interference from the dynamoelectric machine.

As to claim 7, said claim is directed towards the use of curved fins. Because curved fins are known generally within the art of device cooling, because Emori *et al.* does not preclude the use of such curved fins and because the applicant fails to claim criticality to such a curved fin, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include curved fins within the modification of either Hays *et al.* or Wang *et al.* to include device of Emori *et al.* as modified above as a mere obvious design choice absent a showing of unexpected results or synergistic effect by applicant.

As to claim 8, said claim is directed towards the use of fins of differing widths. Because fins of differing widths are known generally within the art of device cooling, because Emori *et al.* does not preclude the use of such different width fins and because the applicant fails to claim criticality to such different width fins, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include different width fins within the modification of either Hays *et al.* or Wang *et al.* to include the device of Emori *et al.* as modified above as a mere obvious design choice absent a showing of unexpected results or synergistic effect by applicant.

As to claim 12, said claim is directed towards the use of fins of differing materials. Because fins of differing materials are known generally within the art of device cooling, because Emori *et al.* does not preclude the use of such different fin materials and because the applicant fails to claim criticality to such different fin materials, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include different fin materials within the modification of either Hays *et al.* or Wang *et al.* to include the device of Emori *et al.* as modified above as a mere obvious design choice absent a showing of unexpected results or synergistic effect by applicant.

As to claim 17, said claim is directed towards the use of fins of differing lengths. Emori *et al.* discloses cooling fins of differing lengths in fig. 1. Because fins of differing lengths are known generally within the art of device cooling, because it is known generally within the cooling art that heat dissipating fins should be sized so as to prevent inadvertent contact with surfaces, because Emori *et al.* does not preclude the use of such different fin lengths, and because

the applicant fails to claim criticality to such different fin lengths, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include different fin lengths within the modification of either Hays *et al.* or Wang *et al.* to include the device of Emori *et al.* as modified above so as to avoid inadvertent contact with a curved surface or as a mere obvious design choice absent a showing of unexpected results or synergistic effect by applicant.

As to claims 19-22, said claims are directed towards the use of a fin cooling fan. Emori *et al.* discloses a fan in column 3, line 4, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include within the modification of either Hays *et al.* or Wang *et al.* the fan of Emori *et al.* so as to receive the obvious benefits derived there from such as improved electrical component reliability.

As to claim 25, said claim is directed towards the use of a network backbone. Hays *et al.* disclose such a network backbone in col. 8 lines 32+. Wang *et al.* discloses real-time (col. 8 lines 34+) remote monitoring. The use of a network backbone to accomplish this is deemed required and therefore inherent within the teaching of Wang *et al.*

2. Applicant's arguments filed 18 July 2002 have been fully considered but they are not persuasive.

With respect to Applicant's arguments at the middle of page 2 and top of page 3, Applicant argues that merely mounting the associated electronics on the machine would cause thermal damage and environmental contamination to the electronics. With respect to the environmental contamination, it is certainly expected that the associated electronics, even when separate, were encased. Therefore, it would have been obvious that such should remain the case when integrated. Applicant's actions to prevent such contamination is limited to such a container. With respect to the thermal damage, associated electronics would inherently consider as a high priority, keeping the electronics within their design temperature range, even if mounted separately. It is certainly not the case that it is expected that one, when performing the mere mechanical act of integrating such electronics, ignore well known problems already commonly considered in electrical device design. The case law simply requires that the incorporation not

include NEW problems which need to be overcome. That is not the case here. Applicant's rational would require the abandonment of solutions already considered by the electronics designer (heat, both internally and externally generated (as is common when a thermally sensitive electrical device is placed near a higher heat output electrical device, i.e. power supply), electrical interference, etc.).

With respect to Applicant's arguments starting at the bottom of page 2, Applicant argues that there is no motivation found in the prior art to mount monitoring equipment upon industrial equipment. The Examiner notes In re Winslow, 53 CCPA 1574, 1578, 365 F.2d 1017, 1020, 151 USPQ 48, 50-51 (1966). All that is required to show obviousness is that the applicant, "*make his claimed invention merely by applying knowledge clearly present in the prior art. Section 103 requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor.*" This is clearly the case with the instant invention as now claimed.

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Craig Steven Miller whose telephone number is (703) 305-9730. Art Unit facsimile services are now available at (703) 308-7722.

The Examiner can normally be reached on Mondays and Thursdays from 07:00am-5:30pm EDT. Should repeated attempts to reach the Examiner be unsuccessful, the Examiner's Supervisor, Marc Hoff may be reached at (703) 308-1677.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Craig Steven Miller (ss)
27 March 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800